

Brentwood Urban District Council.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

(SAMUEL FRAZER, L.R.C.P., L.R.C.S., &c. Fellow of the
Royal Institute of Public Health).

FOR THE YEAR 1909.

TO THE CHAIRMAN AND MEMBERS OF THE URBAN DISTRICT COUNCIL
GENTLEMEN,—

I beg to submit my Eleventh Annual Report on the
Sanitary Administration of Brentwood.

The same arrangement of compilation as in former years is
adhered to, and the usual tables of statistical information as well as a
summary of the work effected by the Sanitary Inspector will be found
at the end of the Report.

1.—General Character of the District.

The District consists of the old parish of Brentwood, and was
constituted an Urban Authority in April, 1899. For many years
previous to that date, Brentwood remained at a standstill, but during
the last ten years, there has been a steady increase every year in the
growth of the town.

There is comparatively very little building land left in Brentwood
itself, but the adjoining parts of the surrounding parishes have be-
come so thickly populated and so incorporated with Brentwood, as to
form apparently one large town, and it is only necessary to bring the
whole populous area under one Authority, in order that the Sanitary
Administration might be facilitated and rendered satisfactory.

The area of Brentwood is 459 acres, and a small brook which runs between this District and the parishes of Shenfield and South Weald, eventually discharging into the Ingrebourne Brook near Brook Street, takes most of the surface water.

The nature of the soil is for the most part, clay, and as the town is situated on the edge of the London Basin, water appears in springs at some of the most elevated points.

A large proportion of persons, whose occupations are in London, reside in the District, the remainder being employed in the different places of business and workshops.

Brewing, the manufacture of agricultural implements, and brick-making, are the principal industries.

2.—*House Accommodation.*

The housing of the people has been vastly improved, during the last few years.

Ten years ago, when the Urban District was formed the number of houses was 916. The number of houses now is considerably over fourteen hundred. And it should be remembered that the 500 or more new houses built during that period have been constructed with all the modern sanitary improvements.

Besides ordinary dwelling houses, there have also been erected recently, several large buildings such as the Highwood Schools, Jewish Homes, and the Convalescent Home, in Weald Road.

At present the houses may be classified as follows:—

Dwelling Houses	1347
Houses used as Shops, Offices, or Storerooms	31
Houses unoccupied	36
Houses not quite completed	8
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Total (excluding Schools and Insti- tutions),	1422
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Now taking the population on the dwelling houses only, and allowing 5 to each house, we get a population of 6735.

But beside that number, there are the following Institutions to be reckoned, namely :—

Hackney Branch Workhouse and				
Separate Infant School	...	...	...	600
Highwood Schools	...	...	...	369
St. Charles' Schools	..	...	...	230
St. Helen's Convent	...	...	...	60
Jewish Homes	...	...	...	39
Ursuline Schools	...	...	...	30
Grammar School	...	...	...	18
Convalescent Home	...	...	...	14
Total				<hr/> 1360 <hr/>

That is, beside the 6735 persons living in the dwelling houses above referred to, there are 1360 residing in the different Institutions in the District. Adding these two numbers together we get a total population of 8095.

Generally speaking the Sanitary Condition of the house property is satisfactory.

It is most gratifying to contemplate the steady growth and prosperity of Brentwood, during the last 10 years, as indicated by the great increase in the number of houses, and comparatively small number uninhabited. When one considers that for 20 or 30 years the town remained stationary, but with the advent of the Urban Authority, and the concomitant, more interested, more centralised, and more effectual efforts of administration, growth and prosperity has steadily increased, and the general sanitary condition immensely improved, there is every reason to look forward to an enlargement of the area of the District, with feelings of gratification and encouragement.

It is also a pleasure to be able to state that though there are only 36 houses, and those for the most part, middle-class property, unoccupied, yet not a single case of overcrowding has been detected, and no action under the Housing of the Working Classes Act, has been needed.

During the year 37 new houses were erected and completed.

3.—*Sewerage and Drainage.*

The Scheme for the improvement of the Sewerage System, to which I referred, in last year's Report, has been approved by the Local Government Board. Tenders have been received for the carrying out of the work, and it is hoped that early in the New Year, the necessary steps will be taken to push forward this long looked-for improvement.

4.—*Excrement Disposal.*

Practically all the houses in the District are supplied with W.C.s. and flushing apparatus, but there are still a few of the old cottages which have hand-flushing closets.

5.—*Removal of House Refuse.*

The present arrangement for the removal of house refuse has been in vogue for several years and has been carried out in a fairly satisfactory manner.

A contractor is engaged to cart the refuse away, about once a week, in closed vans provided by the Council, and find a suitable dumping ground.

As I have before mentioned, this finding of a dumping ground is almost sure, sooner or latter, to become a matter of some difficulty, so that the expediency of providing a destructor, is a subject which calls for the serious consideration of the Council.

6.—*Water Supply.*

The town is supplied with water by the South Essex Waterworks Company and there has been no cause for complaint during the year.

In 32 houses it was found that the water supply tanks were placed in undesirable positions, such as out-houses, coal-houses, and over the copper in sculleries, and were so fixed that it was impossible to clean them without taking them right down. In all these cases the water supply for household purposes was disconnected from the tanks, and taken direct from the main, so that the tanks are used only for supplying water to the W.C.'s

I may add that in all the new property it is now usual to have the water used for drinking and cooking purposes direct from the main.

7.—*Places over which the Council have Supervision.*

No offensive trades are carried on in the District, and there is only one Common Lodginghouse, which with the Bakehouses and Slaughterhouses have been regularly inspected, and found in a fairly satisfactory condition.

Workshops and workplaces have been regularly inspected, and found satisfactory. A Special Report in accordance with the provisions of the Factory and Workshops Act, 1901, will be found at the end of the Report.

There are three Dairies in the District which have also been regularly inspected, and found in a fairly satisfactory state, though in one case there is still room for improvement.

8.—*Nuisances.*

During the year there were 43 complaints received, and 334 nuisances were detected without complaint.

All these have been abated.

Seven notices were served, but it was not found necessary to take out summonses.

Besides the 600 or more houses visited in consequence of the outbreak of Scarlet Fever, 393 have been inspected in the course of Systematic Inspection, and as may be seen by the Inspectors Summary, 408 re-visits were made in order to see that the work was done.

9.—*Bye Laws.*

The Byelaws have been revised so as to conform with modern requirements, and some points which it was thought dealt rather harshly, with respect to new buildings have been altered, so that all cause of friction has been removed, and they are now carried out without opposition or complaint.

10.—*Method of dealing with Infectious Disease.*

The Medical Men as a rule notify promptly, and usually give me every assistance.

When a case is notified the house is visited at once by either the Inspector or myself, and in case of the removal of the patient to the Isolation Hospital, the premises are immediately cleansed and disinfected. In case of a patient being isolated and treated at home, the premises are disinfected on notification from the Medical Attendant of the patient's convalescence.

There is no Isolation Hospital in the District, but there is an arrangement with the Billericay Rural Authority whereby infectious cases can be received into the Isolation Hospital at Billericay. An enquiry was held sometime ago by the County Medical Officer of Health, as to the accommodation, etc., of this Hospital for the two Districts. His Report tended to show that the Hospital does not fulfil the requirements necessary for both Districts.

This conclusion has again been amply justified, for during the last year many cases have had to be removed to Dagenham, in Romford Rural District, and some to London, whilst a great many had to remain under treatment at their own homes.

However, it is now proposed to make another arrangement with the Billericay Authority whereby the present Isolation Hospital will be enlarged so as to provide accommodation for the infectious cases of both Districts.

Failing enlargement of the Brentwood Urban District and the provision of a separate Hospital for Brentwood, this arrangement will for a time be satisfactory. Disinfection of the houses is carried out by means of a Spray Apparatus, with which the walls, ceilings, furniture, &c., are impregnated with a Disinfecting Solution, whilst the bedding, fabrics, and other infected articles are subject to disinfection by means of Thresh's Portable Disinfector.

When an infectious disease is very prevalent, house to house inspection in those Streets and their neighbourhood where the disease has occurred is adopted, in order that, as in the case of Scarlet Fever, mild or unrecognised cases might be detected.

In cases of diphtheria, antitoxin is supplied free by the Council on application of the medical attendant.

During the year there were 66 houses and premises disinfected in consequence of infectious disease, and there were 1443 articles subject to disinfection by means of the Portable Disinfectant. Besides the above, 5 Schools were cleansed and disinfected.

11.—*Prevalence of Infectious Disease.*

During the year there were 87 cases of infectious diseases notified.

This is the largest number in any one year since the formation of the Urban District, the great increase being due to the large number of cases of Scarlet Fever.

The disease showed signs of increasing toward the end of March, and in the latter part of April and beginning of May assumed the proportion of an epidemic.

On the 5th of May I made a Special Report pointing out as far as was known the cause of the outbreak, and the various means adopted to cope with the disease.

Personally, I visited over 600 houses in the streets and their neighbourhood, in which the disease occurred. All the Schools were closed and thoroughly cleansed and disinfected. In June the number of cases was considerably reduced, and since then 2 or 3 cases come cropping up unexpectedly every month.

The cases were spread over the whole year as follows:—Jan., 1; Feb., 1; Mar., 7; Apr., 30; May, 13; June, 9; July, 4; Aug., 3; Sept., 4; Oct., 2; Nov., 2; Dec., 2; making in all 78 cases of Scarlet Fever.

The other cases notified were Diphtheria 4, Erysipelas 2, Puerperal Fever 1, Enteric Fever 1, and Phthisis 1.

Having the recent outbreak of Scarlet Fever, and the consideration of enlarging the Isolation Hospital, at Billericay, in my mind, I think I ought at this juncture make some mention of an important discussion, which is just now exercising the minds of medical men, more especially those medical men who are particularly interested in the treatment of infectious diseases.

Dr. Milne, who for 30 years has been Medical Officer for Barnardo's Homes and has had exceptional opportunities for observation of his cases, has brought prominently before the medical world a special treatment for Scarlet Fever, which if fully recognised and successfully adopted by medical practitioners, will revolutionise the whole general method of treating the disease as heretofore considered orthodox.

The treatment is not complicated, but in order to be successful must be carried out under the supervision of a medical man and be thorough. It consists principally in applying suitable disinfectants to the throat and skin of the patient suffering from the disease.

After a few days treatment, the patient may be considered incapable of spreading infection, and may be allowed to mix freely with other people without the slightest fear of communicating the disease.

In the present state of public feeling with regard to the danger of spreading infection for a period of about 6 weeks, I am afraid that it will take sometime to remove popular prejudice in the matter.

Speaking for myself, however, I thoroughly believe in Dr. Milne's treatment, and have no doubt in my own mind, that with the treatment he advocates, faithfully carried out, the chance of infection would be considerably lessened, and the patient's recovery greatly accelerated.

At the same time I should still recommend the provision of Isolation Hospitals, for even if it should be considered best to treat Scarlet Fever cases at home, there would always be a wide field of usefulness for the Isolation Hospital.

12.—Vital Statistics.

Of the 78 deaths registered in the District during the year, 12 were of persons not belonging to the District, and 7 deaths of persons belonging to the District, occurred outside it.

The total number of deaths for the purpose of Statistics was, therefore, 73, which is equal to a death-rate of 9.6 per 1000 persons living, on an estimated nett population of 7595, which is obtained by deducting an average of 500 inmates at the Hackney Branch Workhouse, from the estimated gross population.

There were 10 deaths of persons over 80 years, the oldest being 92.

13.—*Zymotic Death-Rate.*

The deaths from all cases include 4 from whooping cough, 2 from scarlet fever, 1 from measles, and 1 from diarrhœal disease.

This makes a total of 8 deaths from the 7 principal specific febrile, or zymotic diseases, and is equivalent to a zymotic death-rate of .98 on the whole population.

The average for the last 5 years was .59.

14.—*Infantile Mortality.*

Ten children under 1 year of age died during the year, and as 123 births were registered, the infant mortality was at the rate of 81.3 per 1000 births.

For the last five years the rate was as follows :

1905	92.6
1906	94.7
1907	69.7
1908	61.5
1909	81.3
Average for 5 years	79.9

No health visitors are employed.

15.—*Birth-rate.*

There were 123 births registered during the year which would be equivalent to a birth-rate of 15.2 per 1000 of the whole population, but if we allow for an average of 725 children at the Schools and Homes we get a corrected birth-rate of 16.6.

16.—*Schools.*

The sanitary arrangements and water supply, in regard to the Schools, are all satisfactory.

Inspection of the School Children is made by the County Medical Inspectors.

17.—*Improvements.*

In my Report last year, I mentioned that foremost amongst the improvements still to be desired were :

- 1st—The Improvement of the Sewerage System.
- 2nd—Provision of an Isolation Hospital.
- 3rd—Provision of an Ambulance.
- 4th—Provision of a Refuse Destructor

With regard to the first and the second, it will have been noticed that both these matters have been taken up by the Council, and are receiving attention.

The necessity for the provision of an Ambulance has not been so evident last year as in former years. During the whole of last year the Ambulance from Billericay has been promptly sent when required.

I have already referred in another part of the Report to the necessity which will ultimately arise for the provision of a Refuse Destructor.

The following table shows, at a glance, the death, birth, and zymotic rates, also the infantile mortality.

Population, censuses of 1901	4432
Population, estimated to middle 1909	8095
Deaths registered in the District	78
Corrections	—12 + 7
Death-rate on nett population	9.6
Zymotic death-rate	.98
Birth-rate on whole population	15.2
Birth-rate (excluding Schools)	16.6
Infant mortality	81.3

The above resumé of the year's work and statistics is, I think, very satisfactory. Important sanitary improvements are on the point of being started, which, when completed, will materially improve the sanitary condition of the District, and reflect credit on the administrators of our small, but flourishing Urban District.

I have the honour to be, Gentlemen,

Your obedient servant,

SAMUEL FRAZER,

Medical Officer of Health, U. D. C., Brentwood.

11th February, 1910.

Vital Statistics of Whole District during 1909 and previous Years.

Year.	Popula- tion estimated to Middle of each Year.	Births.		Total Deaths Registered in the District.			Deaths in Public Institu- tions in the District.		Deaths of Non- Residents registered in Public Institu- tions beyond the District.		Nett Deaths at all Ages belonging to the District.	
		Number.	Rate.*	Under 1 Year of Age		At all ages.		Rate.*	Number.	Rate.*	Number.	Rate.*
				Number.	Rate per 1,000 Births registered	Number.	Rate.*					
1	2	3	4	5	6	7	8		10	11	12	13
1899	5270	84	15.9	13	154.7	57	10.8		4	7	60	11.3
1900	5355	135	27.9	12	88.8	62	11.5		1	8	69	13.5
1901	4957	82	16.5	10	121.9	48	9.6		0	5	53	10.69
1902	5157	91	17.6	12	131.8	44	8.5		0	12	56	10.8
1903	5657	106	18.7	9	84.9	53	9.3		4	5	54	9.56
1904	6098	102	16.7	8	78.4	58	9.5		1	10	68	11.1
1905	6243	108	17.8	10	92.6	46	7.3		0	9	55	8.8
1906	6438	116	18	10	86.2	53	8.2		2	10	63	9.8
1907	7542	130	17.2	10	76.9	46	6		0	14	60	7.9
1908	7747	130	16.7	8	61.5	51	6.5		0	10	61	7.8
Averages for years 1899-1908	5986	108	18.3	10	97.7	51.8	8.7		1.2	9	59.9	10.1
1909	8095	123	14	10	81.3	78	9.6		12	7	73	9.6

* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

Total population at all ages 4932 }
 Number of inhabited houses 916 }
 Average number of persons per house...5.4 }

Area of District in acres (exclusive
of area covered by water)...459.

At Census
of 1901.

TABLE III.

**Cases of Infectious Disease notified during
the Year 1909.**

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.							No. of cases removed to Hospital.
	At all Ages.	At Ages—Years.						
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	and upwds.	
Small-pox ...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...
Diphtheria ...	...	...	...	...	...	...	...
Membranous croup ...	4	...	2	2	...	...	2
Erysipelas ...	2	...	...	...	1	1	...
Scarlet fever ...	78	...	15	50	5	8	44	
Typhus fever ...	...	...	...	...	...	...	...
Enteric fever ...	1	...	...	...	1	...	1
Relapsing fever ...	...	...	...	...	...	...	...
Continued fever ...	...	...	...	...	...	...	...
Puerperal fever ...	1	...	...	...	...	1	...
Phthisis ...	1	...	...	...	1	...	...
Totals ...	87	...	17	52	8	10	47	

Isolation Hospital, Billericay, belonging to Billericay R. D. Council.

Total available beds—16.

Number of Diseases that can be concurrently treated—3.

TABLE IV.

Causes of, and Ages at, Death during the Year 1909.

CAUSES OF DEATH.	DEATHS IN OR BELONGING TO WHOLE DISTRICT AT SUBJOINED AGES.								Total deaths in pub- lic in- stitu- tions in Distct. 16
	All ages. 2	Under 1 year. 3	1 and under 5 4	5 and under 15 5	15 and under 25 6	25 and under 65 7	65 and up- wards. 8		
1	2	3	4	5	6	7	8		
Small-pox ... ..	...	...	...	...	...	...	...	...
Measles	1	...	...	1	...	...	...	...
Scarlet fever	2	...	1	...	1	...	...	...
Whooping-cough	4	1	3	...	...	...	...	...
Diphtheria and membranous croup ... ..	...	...	...	...	...	...	...	...
Croup ... ..	...	...	...	...	...	...	...	...
Fever { Typhus ... ..	...	...	...	...	...	...	...	...
{ Enteric ... ..	...	...	...	...	...	...	...	...
{ Other continued ... ..	...	...	...	...	...	...	...	...
Epidemic influenza	3	...	...	1	1	1	...	...
Cholera ... ..	...	...	...	...	...	...	...	...
Plague ... ..	...	...	...	...	...	...	...	...
Diarrhœa ... ..	...	...	...	...	...	...	...	...
Enteritis	1	1	...	...	...	...	...	...
Gastritis	2	...	...	...	...	2	...	1
Puerperal fever ... ..	...	...	...	...	...	...	...	...
Erysipelas ... ..	...	...	...	...	...	...	...	...
Other septic diseases... ..	...	...	...	...	...	...	...	...
Phthisis	1	...	...	...	...	1	...	...
Other tubercular diseases	2	...	...	1	...	1	...	...
Cancer, malignant disease	6	...	...	...	...	3	3	1
Bronchitis	2	...	1	...	...	...	1	4
Pneumonia	3	1	...	...	1	1	...	...
Pleurisy ... ..	...	...	...	...	...	...	...	...
Other diseases of respiratory organs ... ..	...	...	...	...	...	...	...	...
Alcoholism, Cirrhosis of liver	2	...	...	...	...	2	...	...
Venereal diseases ... ..	...	...	...	...	...	...	...	...
Premature birth ... ..	...	...	...	...	...	...	...	...
Heart diseases	9	...	...	...	...	2	7	...
Accidents ... ..	...	...	...	...	...	...	...	...
Suicides ... ..	...	...	...	...	...	...	...	...
Old Age	12	...	...	...	...	...	12	4
Apoplexy	5	...	...	...	...	2	3	1
All other causes	18	7	2	...	3	3	3	1	
All causes	73	10	7	3	6	18	29	12	

TABLE V.

Infantile Mortality during the Year 1909.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under 1 year.
All Causes (certified) ...	1	1	..	..	2	..	1	1	1	3	..	..	1	1	..	..	10
Measles
Whooping Cough
Enteritis	1	..	..	..	..	..	1	..	..	1
Gastritis	1
Premature Birth ...	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1
Want of Breast Milk, Starvation	1	..	..	1	..	..	..	..	..	..	2
Atrophy, Debility	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1
Tuberculous Diseases
Rickets
Meningitis(not Typhoid?)
Convulsions	1	1	..	..	1	..	..	..	2
Pneumonia	1	..	..	..	..	..	..	1
Other Causes	1	..	..	1	..	..	..	1
	1	1			2		1	1	1	3			1	1			10

Births in the year, legitimate, 116.
 " " illegitimate, 7.

Deaths in the year, legitimate infants, 7.
 " " illegitimate infants, 3.

Factory and Workshops Act, 1901.

REPORT FOR 1909.

Fourteen Factories, 71 Workshops and 5 Workplaces were Inspected during the year.

Four defects were found, which were remedied.

Seven nuisances were found, which were abated.

There are 9 Bakehouses; 2 of which are underground.

There are 14 Factories, of which 2 are Laundries. Each workplace and workshop has less than 40 employees.

Matters notified to H.M. Inspector of Factories:—Notified by H.M. Inspector, 1; Reports (of action taken) sent to H.M. Inspector, 1.

Summary of Work done through the Sanitary Inspector,

In the Urban Sanitary District of Brentwood during the Year ending
December 31st, 1909.

	Total No. for Year.	Remarks.
1. Complaints received	43	
2. Nuisances detected without complaint	334	
3. Nuisances abated	373	
4. Notices served	7	
5. Interviews instead	150	
6. Cottages and Premises inspected	393	
7. Revisits to Work, etc.	408	
8. Lodging-houses inspected	1	
9. Slaughter-houses inspected	8	
10. Bakehouses inspected	9	
11. Dairies and Milk Shops inspected	3	
12. Workshops inspected	90	
13. Houses disinfected	66	
14. Houses placed in habitable repair	1	
15. Houses closed	3	
16. Houses erected or re-built for which Water "Certificates" were applied	37	
17. Building Inspections	311	
18. "Certificates" granted	37	
19. Improved supplies of Water afforded	32	
20. Houses connected with sewers	38	
21. Houses connected with water mains	37	
22. Portable Dust bins provided	21	
23. W.C's repaired	24	
24. W.C's supplied with flushing cisterns	7	
25. Cisterns cleaned, repaired, or covered	34	
26. Animals improperly kept removed	2	

(Signed) A. JAMES MEESON,

Mem. Inst. Municipal Engineers.

Associate the Royal Sanitary Institute.